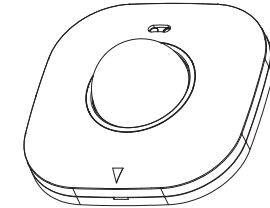




MSA227 IR B1

High-mounting PIR motion sensor
(Casambi+DALI version)



User's Manual

Connected with CASAMBI





Instruction
MI250805A0

PRODUCT DESCRIPTION

MSA227 IR B1 is a high-mounting PIR motion sensor with daylight detection function and casambi wireless communication. Combined with the unique software algorithm of Merrytek, it can accurately detect human movements in almost all high-mounting scenario to trigger smart scene application in warehouse, lobby, workshop etc. Meanwhile it also has one channel DALI dimming terminal output and one channel push control terminal output.

INITIALIZATION

When powered on, sensor indicator will turn off after flashing for 30s and will not detect moving signal during this time. After 30s, you can use casambi app to adjust detection area, hold time and daylight sensor etc parameter.

Daylight Sensor

Indicator

IR Receiver

PIR

Bluetooth Module

220~240V AV Input

PUSH

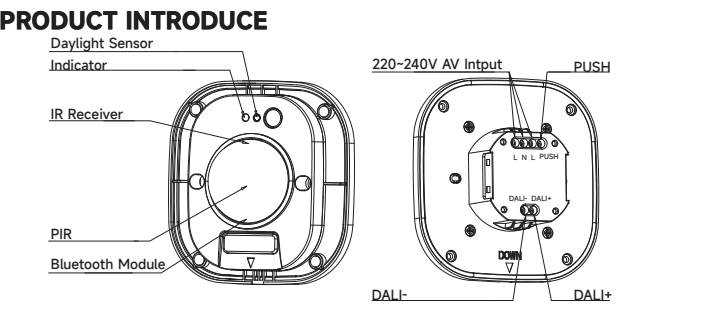
L N L PUSH

DALI- DALI+

DOWN

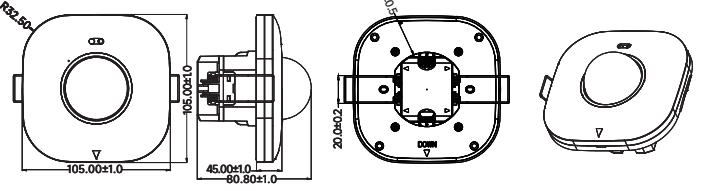
DALI-

DALI+

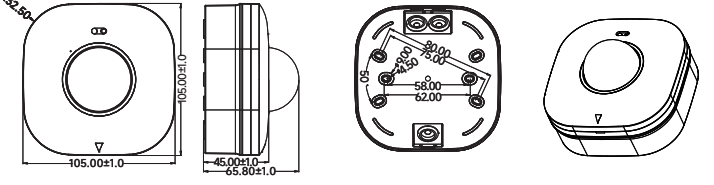


DIMENSION(mm)

Flush mounting



Surface mounting



PARAMETERS	
Model	MSA227 IR B1
Input Voltage	220-240V AC
Working Current	20mA max
Power Consumption	≤0.5W @220/230V AC
Output Signal	DALI+PUSH+Casambi
Function	PIR motion detection+ daylight sensor
Detection Area	Casambi app setting: 100%/75%/50%/25%
Sensor Hold Time	Casambi app setting: 5s/1min/3min/10min
Daylight Sensor	0-1200lux
Radius Detection Rangel based on 100% sensitivity and tangential moving)	4-5m@25°C based on 8m mounting height(radial moving trigger range shall be less than tangential moving)
Remote Control	Available
Mounting Height	2.5-10m, typical value:8m
Drill Hole	Φ55mm
Working Temperature	-25°C...+50°C(detection range might differ based on different temperature)
Storage Temperature	-40°C--+80°C
Warranty	5 year (available based on product quality under indoor application)
Certificate	Compliant to CE
Environmental Requirements	Compliant to RoHS
IP Rating	IP20(flush mounting) IP54(surface mounting)

DETECTION AREA



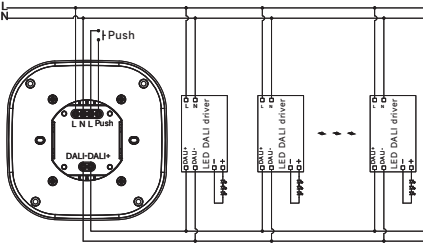
Major motion activates

• Major motion activates: detect the human significant moving (walking) in the detection area.

Detection sensitivity	100%	75%	50%	25%
Radius detection range based on 8m heigh	4.5-5.0m	3.5-4.5m	3.0-3.5m	2.0-3.0m

Tips: Above data is based on 1.6m height people tangential moving towards sensor by 0.3m/s velocity in 81 m² open area for reference. If any variate changes, the detetcion range might be different.
Factory settings: Detection Area:100%, Hold Time: 5s, Indicator:ON.

WIRING INSTRUCTION

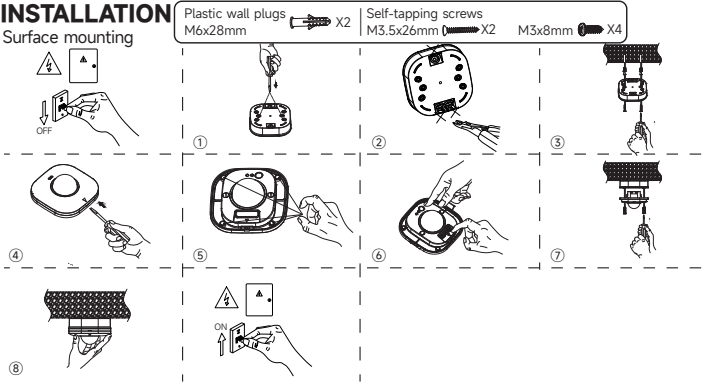


Wiring layout suggestion:
1. LN terminal shall connect to AC input, DALI+ 、DALI- shall connect to dali driver, push and L connect to PUSH button,please wiring correctly
2. DALI terminal output broadcast signal and max access dali driver quantity shall not exceed 64pc
3. PUSH terminal can turn on/off by short press and dimming by long press

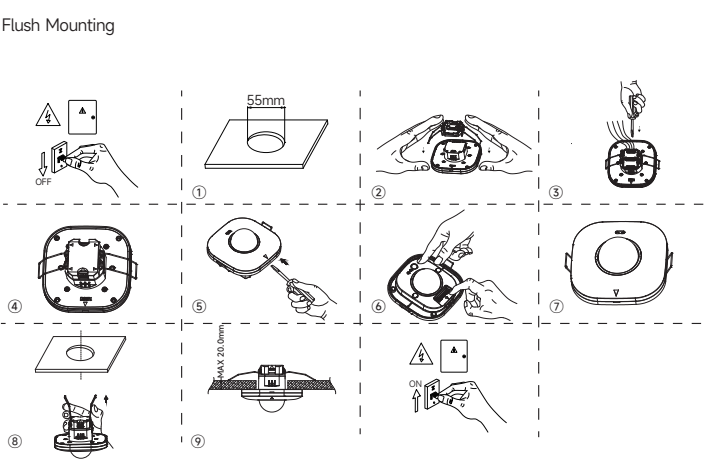
INSTALLATION

Surface mounting

Plastic wall plugs M6x28mm X2 Self-tapping screws M3.5x26mm X2 M3x8mm X4

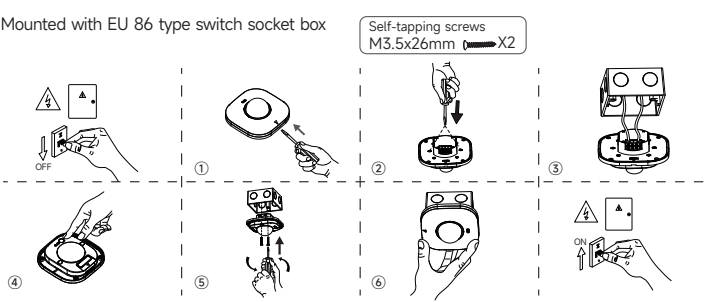


Flush Mounting



Mounted with EU 86 type switch socket box

Self-tapping screws M3.5x26mm X2



APP INSTRUCTIONS



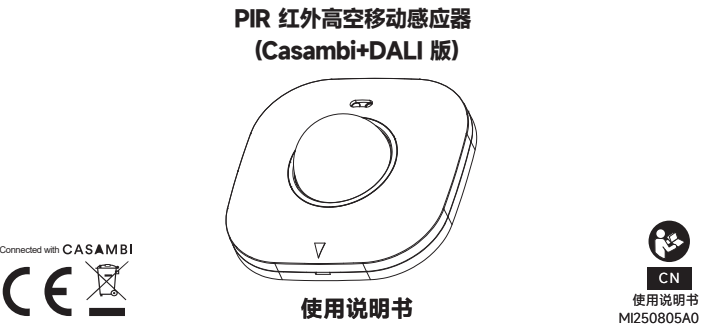
Casambi APP
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Scan the QR code to
download
Casambi APP



Function Configuration
Download

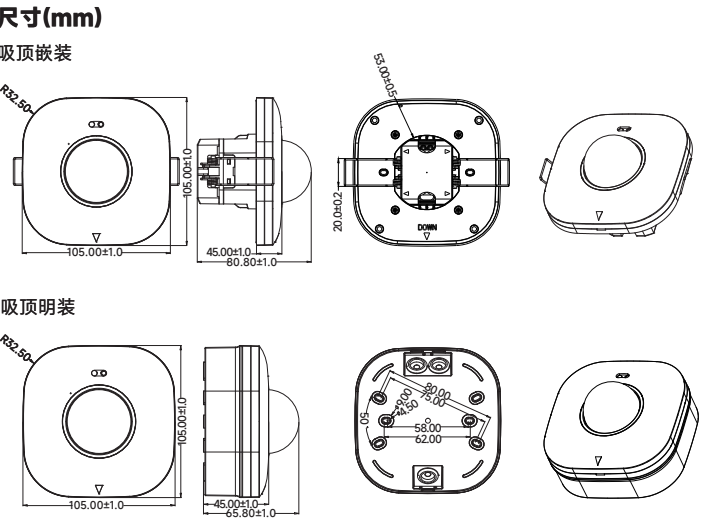
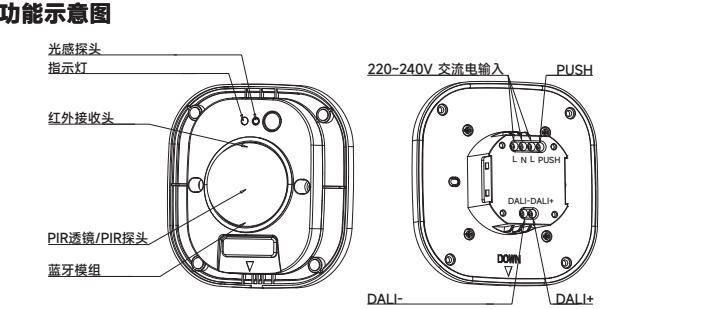


产品介绍

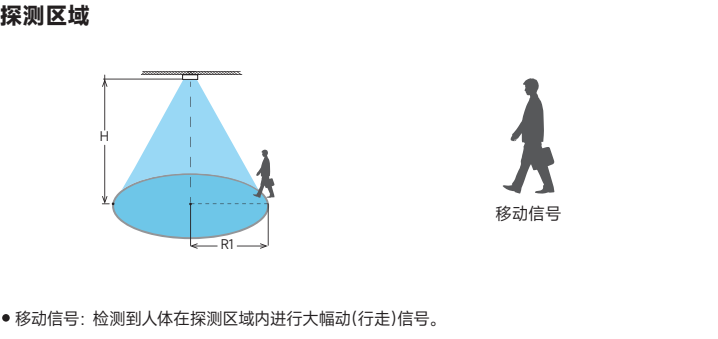
MSA227 IR B1 是迈睿科技自主设计推出的一款高空吸顶嵌装的 PIR+ 光感传感器，其采用被动红外技术，能够实时感知探测区域内人或宠物的移动信号。同时产品还内置了光照传感器，可实时感知周围环境的光照强度，并结合 PIR 红外感知情况为当下基于人体感应和环境光照的智能家居、智慧酒店、智慧办公等场景提供快速且精准的前端传感输入，同时其可轻松接入 casambi 蓝牙无线控制生态并支持一路本地继电器开关控制。

初始化

初次通电产品进入自检状态，指示灯闪烁 30 秒后关闭并发送有人指令，初始化期间不探测外界移动感应信号,指示灯延时时间、探测范围(感应距离)可以通过 casambi APP 来设置。



型号	MSA227 IR B1
输入电压	220-240V AC
工作电流	20mA max
工作功耗	≤0.5W @220/230V AC
输出信号	DALI+PUSH+casambi
感应方式	PIR 红外热释电+光感探测
感应范围	Casambi app 设置：100%/75%/50%/25%
延时设置	Casambi app 设置：5s/1min/3min/10min
光感上报范围	0-1200lux
探测范围 (100%灵敏度，半径)	移动 (8m 高)：4-5m @25°C (人体径向运动时，比切向运动的感应距离更近)
遥控功能	支持
安装高度	2.5-10m 典型值：8m
开孔尺寸	Φ55mm
工作环境温度	-25°C~+50°C（温度越低，感应距离可能变远，温度越高，感应距离可能变近）
储存温度	-40°C~+80°C
质保	5年（只限室内使用情况下产品本身质量问题）
符合认证	CE SAA
环保要求	符合欧盟 RoHS 要求
防护等级	IP20(吸顶嵌装) IP54（吸顶明装）



• 移动信号：检测到人体在探测区域内进行大幅动(行走)信号。

档位	100%	75%	50%	25%
安装 8 米高的感应半径(R)	4.5-5.0m	3.5-4.5m	3.0-3.5m	2.0-3.0m

注意：以上测试数据基于 81 m²开阔空间，1.6m 高测试人员以 0.3m/s 切向走向传感器直至触发所得。在不同空间下，不同体态的人以不同速度走向传感器的触发距离可能有所偏差。
出厂设置：检测范围：100%，延时设置：5S，指示灯：打开

